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SEQUENCE LISTING

(1) GENERAL INFORMATION

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- (ii) TITLE OF INVENTION: Directed Evolution of Novel
Binding Proteins
- (iii) NUMBER OF SEQUENCES: 121
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Suite 300
 - (C) CITY: Washington,
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 - (E) COUNTRY: USA
 - (F) ZIP: 20004
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: WORDPERFECT 5.1
- (vi) CURRENT APPLICATION DATA:
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 - (B) FILING DATE: 26-JAN-1993
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- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 07/664,989
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- (x) PRIOR APPLICATION DATA:
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(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:28 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:1:

Phe Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa Leu
1 5 10 15

Xaa Xaa His Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
20 25

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:28 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:2:

Tyr Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa Leu
1 5 10 15

Xaa Xaa His Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
20 25

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:29 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:3:

Phe Xaa Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Leu Xaa Xaa His Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
20 25

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:29 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:4:
 Tyr Xaa Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa
 1 5 10 15

Leu Xaa Xaa His Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
 20 25

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:30 amino acids
 (B) TYPE:amino acid
 (D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:5:
 Phe Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa
 1 5 10 15

Xaa Leu Xaa Xaa His Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
 20 25 30

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:30 amino acids
 (B) TYPE:amino acid
 (D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:6:
 Tyr Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa
 1 5 10 15

Xaa Leu Xaa Xaa His Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
 20 25 30

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:8 amino acids
 (B) TYPE:amino acid
 (D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:7:
 Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa
 1 5

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:12 amino acids
 (B) TYPE:amino acid
 (D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:8:
 Gly Asn Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Ser Gly
 1 5 10

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:4 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:9:

Met Lys Lys Ser

1

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:5 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:10:

Glu Gly Gly Gly Ser

1

5

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:15 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:11:

Glu Gly Gly Gly Ser Gly Ser Ser Ser Leu Gly Ser Ser Ser Leu

1

5

10

15

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:4 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:12:

Met Gly Asn Gly

1

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:4 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:13:

Ser Asn Thr Leu

1

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:4 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:14:
Gly Gly Gly Ser
1

(2) INFORMATION FOR SEQ ID NO:15:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:5 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:15:
Glu Gly Gly Gly Thr
1 5

(2) INFORMATION FOR SEQ ID NO:16:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:5 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:16:
Gly Ser Ser Ser Leu
1 5

(2) INFORMATION FOR SEQ ID NO:17:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:11 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:17:
Gly Gly Glu Gly Gly Gly Ser Ala Ala Glu Gly
1 5 10

(2) INFORMATION FOR SEQ ID NO:18:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:15 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:18:
Glu Gly Gly Gly Ser Gly Ser Ser Ser Leu Gly Ser Ser Ser Leu
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:19:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:10 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:19:

Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:13 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:20:

Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys
1 5 10

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:14 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:21:

Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa
1 5 10

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:15 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:22:

Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:16 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:23:

Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:17 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:24:

Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

Xaa

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:18 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:25:

Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
1 5 10 15

Xaa Xaa

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:14 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:26:

Xaa Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys
1 5 10

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:15 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:27:

Xaa Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:16 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:28:

Xaa Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:17 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:29:

Xaa Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

Xaa

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:18 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:30:

Xaa Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

Xaa Xaa

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:19 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:31:

Xaa Xaa Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

Xaa Xaa Xaa

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:22 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:32:

Xaa Xaa Cys Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa
1 5 10 15

Xaa Xaa Xaa Cys Xaa
20

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:22 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:33:

Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg Gln Cys Lys
1 5 10 15

Pro Gln Arg Cys Cys Ala
20

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:24 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:34:

Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys
20

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:25 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:35:

Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys
20 25

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:25 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:36:

Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys
20 25

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:26 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:37:

Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys
20 25

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:26 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:38:

Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
20 25

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:27 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:39:

Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
20 25

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:14 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:40:

His Asn Gly Met Xaa Xaa Xaa Xaa Xaa Xaa His Asn Gly Cys
1 5 10

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:14 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:41:

Cys Asn Gly Met Xaa Xaa Xaa Xaa Xaa Xaa His Asn Gly His
1 5 10

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:15 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:42:

His Gly Pro Xaa Met Xaa Xaa Xaa Xaa Xaa Xaa His Asn Gly Cys
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:13 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:43:

Ser Asp Glu Ala Ser Gly Cys His Tyr Gly Val Leu Thr
1 5 10

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:44:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Lys Ala
1 5 10 15

Arg Ile Ile Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:45:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Gln Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:46:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Gly
1 5 10 15

Phe Phe Ser Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:47:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Gly
1 5 10 15

Phe Phe Gln Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:48:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:protein
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:49:
Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Ile Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:58 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:50:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Ile Phe Lys Arg Leu Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:58 amino acids
(B) TYPE:amino acid
(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:51:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Ile Ala
1 5 10 15

Phe Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:52:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Ile Ala
1 5 10 15

Phe Phe Gln Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:53:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Ile Ala
1 5 10 15

Leu Phe Lys Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:54:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Met Gly
1 5 10 15

Phe Ser Lys Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:55:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Met Ala
1 5 10 15

Leu Phe Lys Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:56:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Asn Thr Gly Pro Cys Phe Ala
1 5 10 15

Ile Thr Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:57:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Met Ala
1 5 10 15

Leu Phe Gln Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:58:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Met Ala
1 5 10 15

Ile Ser Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:59:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Leu Tyr Gly Gly Cys Lys Gly Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:60:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Glu Tyr Gly Gly Cys Trp Ala Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:61:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Gly Tyr Ala Gly Cys Arg Ala Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:62:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Glu Tyr Gly Gly Cys His Ala Glu Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:63:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Leu Tyr Gly Gly Cys Trp Ala Gln Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:64:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Arg Tyr Gly Gly Cys Leu Ala Glu Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:65:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Asp Tyr Gly Gly Cys His Ala Asp Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:66:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15
Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30
Phe Lys Tyr Gly Gly Cys Leu Ala His Gly Asn Asn Phe Lys Ser Ala
35 40 45
Glu Asp Cys Met Arg Thr Cys Gly Gly Ala.
50 55

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:67:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15
Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30
Phe Thr Tyr Gly Gly Cys Trp Ala Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45
Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:68:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15
Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30
Phe Asn Tyr Gly Gly Cys Glu Gly Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45
Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:69:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Gln Tyr Gly Gly Cys Glu Gly Tyr Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:70:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Gln Tyr Gly Gly Cys Leu Gly Glu Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:71:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe His Tyr Gly Gly Cys Trp Gly Gln Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:72:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe His Tyr Gly Gly Cys Trp Gly Glu Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:73:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Lys Tyr Gly Gly Cys Trp Gly Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:74:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Lys Tyr Gly Gly Cys His Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:75:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Pro Tyr Gly Gly Cys Trp Ala Lys Gly Asn Asn Phe Lys Leu Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:76:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Lys Tyr Gly Gly Cys Trp Gly His Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:77:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Asn Tyr Gly Gly Cys Trp Gly Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:78:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Thr Tyr Gly Gly Cys Leu Gly His Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:79:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Thr Tyr Gly Gly Cys Leu Gly Tyr Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:80:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Lys Tyr Gly Gly Cys Trp Ala Glu Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:81:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Gly Tyr Gly Gly Cys Trp Gly Glu Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:82:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Glu Tyr Gly Gly Cys Trp Ala Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:83:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys His Gly Asp Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:84:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Met Tyr Gly Gly Cys Gln Gly Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:85:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Tyr Tyr Gly Gly Cys Trp Ala Lys Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:86:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Met Tyr Gly Gly Cys Trp Gly Asp Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:58 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:87:

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Val Ala
1 5 10 15

Met Phe Pro Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Thr Tyr Gly Gly Cys His Gly Asn Gly Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:6 amino acids

(B) TYPE:amino acid

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:protein

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:88:

Xaa Xaa Xaa Xaa Xaa Xaa
1 5

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:24 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:89:

NNT TGT NNT NNG NNG NNT TGT NNT 24

Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa

1

5

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:13 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:other nucleic acid

(A) DESCRIPTION:synthetic DNA fragment

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:90:

CCGTCGAATC CGC 13

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:13 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:other nucleic acid

(A) DESCRIPTION:synthetic DNA fragment

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:91:

GCGGATTGTA CGG 13

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:16 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:single

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:other nucleic acid

(A) DESCRIPTION:synthetic DNA fragment

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:92:

CGTAACCTCG TCATTA 16

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:16 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:single

(D) TOPOLOGY:linear

(ii) MOLECULAR TYPE:other nucleic acid

(A) DESCRIPTION:synthetic DNA fragment

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:93:

CCGTAGGTAC CTACGG 16

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:15 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:other nucleic acid
(A) DESCRIPTION:synthetic DNA fragment
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:94:
CACGGCTATT ACGGT 15

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:12 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:linear
(ii) MOLECULAR TYPE:other nucleic acid
(A) DESCRIPTION:synthetic DNA fragment
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:95:

ACCGTAATAG CC 12

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:20 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:96:

ACT TCC TCA TGA AAAAGTCT 20

Thr Ser Ser

1

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:20 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:97:

ACTTCCTC ATG AAA AAG TCT 20

Met Lys Lys Ser

1

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:20 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:98:

ACT TCC AGC TGA AAAAGTCT 20

Thr Ser Ser

1

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:20 base pairs
 (B) TYPE:nucleic acid
 (C) STRANDEDNESS:double
 (D) TOPOLOGY:circular
 (ii) MOLECULAR TYPE:genomic DNA
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:99:
 ACTTCCAG CTG AAA AAG TCT 20
 Met Lys Lys Ser
 1

(2) INFORMATION FOR SEQ ID NO:100:
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:16 base pairs
 (B) TYPE:nucleic acid
 (C) STRANDEDNESS:double
 (D) TOPOLOGY:circular
 (ii) MOLECULAR TYPE:genomic DNA
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:100:
 C GAG GGA GGA GGA TCC 16
 Glu Gly Gly Gly Ser
 1 5

(2) INFORMATION FOR SEQ ID NO:101:
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:16 base pairs
 (B) TYPE:nucleic acid
 (C) STRANDEDNESS:double
 (D) TOPOLOGY:circular
 (ii) MOLECULAR TYPE:genomic DNA
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:101:
 C GGA TCC TCC TCC CTC 16
 Gly Ser Ser Ser Leu
 1 5

(2) INFORMATION FOR SEQ ID NO:102:
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:33 base pairs
 (B) TYPE:nucleic acid
 (C) STRANDEDNESS:double
 (D) TOPOLOGY:circular
 (ii) MOLECULAR TYPE:genomic DNA
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:102:
 GGT GGC GAG GGA GGA GGA TCC GCC GCT GAA GGT 33
 Gly Gly Glu Gly Gly Gly Ser Ala Ala Glu Gly
 1 5 10

(2) INFORMATION FOR SEQ ID NO:103:
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH:21 base pairs
 (B) TYPE:nucleic acid
 (C) STRANDEDNESS:double
 (D) TOPOLOGY:circular
 (ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:103:

GGC GGA TCC TCC TCC CTC GCC 21

Gly Gly Ser Ser Ser Leu Ala

1

5

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:20 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:104:

GC GAG GGA GGA GGA TCC GCC 20

Glu Gly Gly Gly Ser Ala

1

5

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:52 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:105:

GGC GAG GGA GGA GGA TCC GGA TCC TCC TCC CTC GGA TCC TCC TCC 45

Gly Glu Gly Gly Gly Ser Gly Ser Ser Ser Leu Gly Ser Ser Ser

1

5

10

15

CTC GCC C 52

Leu Ala

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:18 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:106:

RVT VYT RRS VH G VH G RMG 18

Xaa Xaa Xaa Xaa Xaa Xaa

1

5

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:12 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:107:

VYT VNT NNK VWG 12

Xaa Xaa Xaa Xaa

1

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:27 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:108:

CCT TGC GTG GCT ATG TTC CAA CGC TAT 27

Pro Cys Val Ala Met Phe Gln Arg Tyr

1

5

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:27 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:109:

CCT TGC GTC GGT TTC TTC TCA CGC TAT 27

Pro Cys Val Gly Phe Phe Ser Arg Tyr

1

5

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:27 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:110:

CCT TGC GTC GGT TTC TTC CAA CGC TAT 27

Pro Cys Val Gly Phe Phe Gln Arg Tyr

1

5

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:27 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:111:

CCT TGC GTC GCT ATG TTC CCA CGC TAT 27

Pro Cys Val Ala Met Phe Pro Arg Tyr

1

5

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:27 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:112:
CCT TGC GTC GCT ATC TTC CCA CGC TAT 27
Pro Cys Val Ala Ile Phe Pro Arg Tyr
1 5

(2) INFORMATION FOR SEQ ID NO:113:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:27 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:113:
CCT TGC GTC GCT ATC TTC AAA CGC TCT 27
Pro Cys Val Ala Ile Phe Lys Arg Tyr
1 5

(2) INFORMATION FOR SEQ ID NO:114:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:27 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:114:
CCT TGC ATC GCT TTC TTC CCA CGC TAT 27
Pro Cys Ile Ala Phe Phe Pro Arg Tyr
1 5

(2) INFORMATION FOR SEQ ID NO:115:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:27 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:115:
CCT TGC ATC GCT TTC TTC CAA CGC TAT 27
Pro Cys Ile Ala Phe Phe Gln Arg Tyr
1 5

(2) INFORMATION FOR SEQ ID NO:116:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH:27 base pairs
(B) TYPE:nucleic acid
(C) STRANDEDNESS:double
(D) TOPOLOGY:circular
(ii) MOLECULAR TYPE:genomic DNA
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:116:

CCT TGC ATC GCT TTG TTC AAA CGC TAT 27
Pro Cys Ile Ala Leu Phe Lys Arg Tyr
1 5

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH:15 base pairs
- (B) TYPE:nucleic acid
- (C) STRANDEDNESS:double
- (D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:117:

ATG GGT TTC TCC AAA 15
Met Gly Phe Ser Lys
1 5

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH:15 base pairs
- (B) TYPE:nucleic acid
- (C) STRANDEDNESS:double
- (D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:118:

ATG GCT TTG TTC AAA 15
Met Ala Leu Phe Lys
1 5

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH:15 base pairs
- (B) TYPE:nucleic acid
- (C) STRANDEDNESS:double
- (D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:119:

TTC GCT ATC ACC CCA 15
Phe Ala Ile Thr Pro
1 5

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH:15 base pairs
- (B) TYPE:nucleic acid
- (C) STRANDEDNESS:double
- (D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:120:

ATG GCT TTG TTC CAA 15
Met Ala Leu Phe Gln
1 5

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:15 base pairs

(B) TYPE:nucleic acid

(C) STRANDEDNESS:double

(D) TOPOLOGY:circular

(ii) MOLECULAR TYPE:genomic DNA

(xi) SEQUENCE DESCRIPTION:SEQ ID NO:121:

ATG GCT ATC TCC CCA 15

Met Ala Ile Ser Pro

1

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